

Application No. 10/623430  
Amendment dated April 12, 2004  
Reply to Office Action of January 13, 2004

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) A [bow] stabilizer for an archery bow, the stabilizer comprising an elongated member having a near end for attachment to an archery bow and a distal end, the elongated member having a length  $L$ , and a weight attached to the elongated member proximate the distal end, wherein the center of gravity of the elongated member and weight is located within 25 percent of length  $L$  from the distal end of the elongated member, wherein the weight has a dimension  $D$  in a direction normal to the length  $L$  of the elongated member which is at least three times a thickness  $T$  of the weight in the same direction as the length of the elongated member.
2. (Original) The stabilizer of claim 1, wherein a first mass  $M_1$ , of the weight is at least 1.2 times a second mass  $M_2$  of the elongated member.
3. (Original) The stabilizer of claim 1, wherein the weight is disk-shaped.
4. (Canceled)
5. (Original) The stabilizer of claim 1, wherein the elongated member is a rod.
6. (Original) The stabilizer of claim 1, wherein the elongated member is a hollow rod.
7. (Original) The stabilizer of claim 1, wherein a natural frequency of the first bending mode of the elongated member and weight is at least 20 Hz.

8. (Currently amended) The stabilizer of claim [4] 38, wherein a natural frequency of the first bending mode of the elongated member and weight is at least 40 Hz.

9. (Currently amended) An archery bow having at least one front stabilizer, the front stabilizer having a near end fixed to the bow, a distal free end, and a length L, the center of gravity of the front stabilizer being located within a distance D of 25 percent of the length L of the distal end of the stabilizer, wherein the distance D is within 15 percent of the length L of the distal end of the stabilizer.

10. (Canceled)

11. (Original) The archery bow of claim 9, wherein the stabilizer comprises an elongated member and a weight disposed on the elongated member proximate the distal end thereof.

12. (Original) The archery bow of the claim 11, wherein the elongated member is a rod and the weight has a disk shape.

13. (Original) The archery bow of claim 11, wherein the weight has a dimension D in a direction normal to a length L of the elongated member which is at least three times a thickness T of the weight in the same direction as the length of the elongated member.

14. (Original) The archery bow of claim 11, wherein a first mass M1, of the weight is at least 1.2 times a second mass M2 of the elongated member.

15. (Original) The archery bow of claim 11, wherein the elongated member is a rod.

16. (Original) The archery bow of claim 11, wherein the elongated member is a hollow rod.

17. (Original) The archery bow of claim 9, wherein a natural frequency of the first bending mode of the stabilizer is at least 20 Hz.

18. (Currently Amended) The archery bow of claim [9] 41, wherein a natural frequency of the first bending mode of the stabilizer is at least 40 Hz.

19. (Canceled)

20. (Canceled)

21. (Currently Amended) The stabilizer of claim [19] 30, wherein the elongated member is a rod.

22. (Currently Amended) The stabilizer of claim [19] 30, wherein the elongated member is a hollow rod.

23. (Currently Amended) The stabilizer of claim [19] 30, wherein the weight is disk shaped.

24. (Currently Amended) The stabilizer of claim [19] 30, wherein a first mass M, of the weight is at least 1.2 times a second mass M2 of the elongated member.

25. (Currently Amended) [An] The archery bow [having at least one front stabilizer attached thereto,] of claim 34, wherein the front stabilizer [having] has a natural frequency of the first bending mode of at least 20 Hz.

26. (Original) The archery bow of claim 25, wherein the natural frequency of the first bending mode is at least 40 Hz.

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Original) A stabilizer for an archery bow, the stabilizer comprising an elongated member having a near end for attachment to an archery bow and a distal end, and a weight attached to the elongated member proximate the distal end, the weight having a first mass  $M_1$  which is at least 1.2 times a second mass  $M_2$  of the elongated member.

31. (Original) The stabilizer of claim 30, wherein the first mass  $M_1$  is at least two times the second mass  $M_2$ .

32. (Original) The stabilizer of claim 30, wherein the weight has a dimension  $D$  normal to the elongated member and a thickness  $T$  along a length  $L$  of the elongated member, wherein the dimension  $D$  is greater than the thickness  $T$ .

33. (Original) The stabilizer of claim 30, wherein the dimension  $D$  is at least three times greater than the thickness  $T$ .

34. (Original) An archery bow having at least one front stabilizer attached thereto, the front stabilizer comprising an elongated member having a near end for attachment to an archery bow, a distal end, and a weight attached to the elongated member proximate the distal end, the weight having a first mass  $M_1$  which is at least 1.2 times a second mass  $M_2$  of the elongated member.

35. (Original) The archery bow of claim 34, wherein the first mass M1 is at least two times the second mass M2.

36. (Original) The archery bow of claim 34, wherein the weight has a dimension D normal to the elongated member and a thickness T along a length L of the elongated member, wherein the dimension D is greater than the thickness T.

37. (Original) The archery bow of claim 34 wherein the dimension D is at least three times greater than the thickness T.

38. (New) A bow stabilizer for an archery bow, the stabilizer comprising an elongated member having a near end for attachment to an archery bow and a distal end, the elongated member having a length L, and a weight attached to the elongated member proximate the distal end, wherein the center of gravity of the elongated member and weight is located within 25 percent of length L from the distal end of the elongated member and wherein a natural frequency of the first bending mode of the elongated member and weight is at least 20 Hz.

39. (New) An archery bow having at least one front stabilizer, the front stabilizer having a near end fixed to the bow, a distal free end, and a length L, the center of gravity of the front stabilizer being located within a distance D of 25 percent of the length L of the distal end of the stabilizer, wherein the stabilizer comprises an elongated member and a weight disposed on the elongated member proximate the distal end thereof, and wherein the weight has a dimension D in a direction normal to a length L of the elongated member which is at least three times a thickness T of the weight in the same direction as the length of the elongated member.

40. (New) An archery bow having at least one front stabilizer, the front stabilizer having a near end fixed to the bow, a distal free end, and a length L, the center of gravity of the front stabilizer being located within a distance D of 25 percent of the

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length L of the distal end of the stabilizer, wherein the stabilizer comprises an elongated member and a weight disposed on the elongated member proximate the distal end thereof, and wherein a first mass M1, of the weight is at least 1.2 times a second mass M2 of the elongated member.

41. (New) An archery bow having at least one front stabilizer, the front stabilizer having a near end fixed to the bow, a distal free end, and a length L, the center of gravity of the front stabilizer being located within a distance D of 25 percent of the length L of the distal end of the stabilizer, wherein a natural frequency of the first bending mode of the stabilizer is at least 20 Hz.